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RECORDS OF AFRICAN BEES

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The holotypes of the new forms will be found in The American Museum of Natural History.

Halictus albofasciatus Smith

Orange Free State: Donkerpoort, April (L. Ogilvie, J. Ogilvie); North Bank Halt, Norvals Pont, April (J. Ogilvie, L. Ogilvie).

Halictus dispilurus, new species

FEMALE.—Length about 5.6 mm., anterior wing about 4 mm.; head and thorax black, the head, mesothorax and scutellum brilliantly shining, but the very large area of metathorax, which is rounded behind, entirely dull; head and thorax with scanty pale hair, very thin on face, almost lacking on thoracic dorsum (no trace of bands in the sutures), but long and fairly abundant on pleura; head broader than long, inner orbits concave; supraclypeal area prominent, polished; clypeus very short, shining, with sparse punctures; mandibles dusky reddish; flagellum red beneath except at base; front dullish, shining at extreme sides; mesothorax very finely punctured, with a strong median groove; posterior face of metathorax dull; tegulae brown, dark in front; wings grayish hyaline, with rosy and green iridescence; stigma large, light yellowish brown; second cubital cell about square; legs black, with the tarsi pale red; abdomen stout, without hair-bands or spots; first tergite brown, blackened basally, and with a large black spot on each side; second tergite red, with a pair of very large black marks, pointed mesad; fourth and following tergites black, with pallid margins.

Microscopical characters: mesothorax very minutely lineolate, with very sparse piliferous punctures; area of metathorax extremely densely rugulose, with the appearance of bead-work, all over, and with weak plicae on basal part; hind spur minutely spinulose, after the manner of *H. platti* Cockerell.

Natal: The Bluff, Durban, Oct. 15, 1931 (L. Ogilvie). Related to *H. platti*, *H. pondonis*, etc., running in the table in African Bees, p. 76, to the group of *H. probitus*, *H. calvini* and *H. villosicaudus*, but distinguished by the marking of the abdomen. *H. probitus* is larger, with the area of metathorax relatively short, crescentic. *H. calvini* and *H. villosicaudus* have the mesothorax dullish.

Halictus duponti Vachal

Tanganyika Territory: Kigoma, Aug. 31 (J. Ogilvie). Kabalo, Belgian Congo, Aug. 15 (A. Mackie).

Halictus pachyurus, new species

FEMALE.—Length about 9 mm., anterior wing 7 mm., abdomen broad, its width about 3.5 mm.; black, including mandibles and antennae, but the tarsi rather dark red, the front basitarsi blackened; tegulae black, a little reddish posteriorly; wings grayish hyaline, stigma and nervures rather pale reddish, outer nervures (recurrent and intercubitus) thin and very pale; face and cheeks with white hair, but pale reddish hair on vertex, and red hair on labrum; thorax above with pale reddish hair, metathorax and pleura with white; legs with dull white hair, pale yellowish on inner side of basitarsi; the middle tibiae are red at apex; the hind basitarsi have a shining very red area at extreme base, and a copper-red brush at apex; the broad abdomen is shining, the first tergite very narrowly reddened apically, the second and third with broad red apical tegumentary bands, the fourth with the margin pallid; the basal bands of tomentum are fulvescent, apparent only at sides of second tergite, on third and fourth probably entire, but concealed in middle; venter with long white hair. Head approximately circular seen from in front; a tooth at each side of clypeal margin; apical part of clypeus shining, but the upper part very densely and finely punctured; supraclypeal area densely punctured, with a shining spot in middle; front dull except at extreme sides; vertex shining; mesothorax very finely punctured, shining on disk, distinctly glaucous; scutellum dull, depressed in middle; red hair in middle of postscutellum; area of metathorax short, with very fine punctiferous plicae and a shining ridge in middle; second cubital cell very broad, receiving recurrent nervure not far from end; third cubital not much broader than second; hind spur with nine short oblique but strong spines.

Belgian Congo: Tenke, July 30–Aug. 9 (J. Ogilvie). In many respects this resembles *H. matoporum kafubuensis* Cockerell, and the sculpture of the clypeus, with fine dense punctures on upper part, associates it with this species, and separates it from the various forms of *H. shanganiensis* Cockerell. Yet the red abdominal bands at once separate it from these forms, and place it in another group. These bands also separate it from *H. aureotarsis* Friese, which has reddish-yellow tarsi. *H. rhodaspis* Cockerell, from Natal, agrees in having the red hair in middle of postscutellum, but it has black tarsi, and no red tegumentary bands on abdomen. *H. pulchricinctus* Cockerell has orange bands on the first two tergites, and the wings reddened.

A new record for *H. matoporum kafubuensis* is Elisabethville (J. Ogilvie).

HALICTUS SUBGENUS CHLORALICTUS (ROBERTSON)

Halictus (Chloralictus) angustulus, new species

FEMALE.—Length about 5 mm., anterior wing 3.8 mm.; slender, looking rather like a male, with little hair, and no bands or spots of hair on abdomen; upper part of head, the mesothorax and scutellum, dark green, not brassy, the other parts of head and thorax black or almost so, the clypeus except the upper end black, with coarse sculpture; mandibles red with the base black; head small and short, the clypeus and upper part of front shining, the middle ocellus little in advance of the

others; upper part of cheeks shining; flagellum pale dull reddish beneath except at base; mesothorax and scutellum moderately shining, the median groove of mesothorax distinct; area of metathorax large, semicircular, dull, the rim not distinctly shining; posterior truncation small and dull; sides of thorax dull, with a shining spot beneath the wings; tegulae rufous, dark in front; wings grayish hyaline, more dusky apically; stigma dusky sepia-brown, nervures pale brown, the outer ones fairly distinct; second cubital cell rather narrow, receiving recurrent nervure a moderate distance from end; legs black, the tarsi somewhat brownish; abdomen shining, distinctly greenish, the sutural regions reddish. Microscopic characters: clypeus very coarsely punctured; mesothorax transversely lineolate, and with extremely small, scattered punctures; area of metathorax very minutely pitted all over, with short very weak plicae at base; hind spur with long oblique spines as in related species.

Belgian Congo (Katanga); Biano, Aug. 8–11, 1931, 3 females (J. Ogilvie). Related to *H. chloronotus* Cockerell, which is more robust, with more shining, more brassy-green mesothorax, and a much larger head, with broader face.

Halictus (Chloralictus) chloronotus, new species

Female (type).—Length about 5 mm., anterior wing 4 mm.; head and thorax dark green; abdomen very dark brown, almost black, the two basal tergites with a faint suggestion of greenish; head approximately circular seen from in front; antennae black; clypeus with the apical half black; front dull at sides, but shining just below ocelli; mesothorax moderately shining, rather yellowish green, excessively finely punctured, and with a median groove; scutellum dullish; area of metathorax black, semicircular, entirely dull, as seen from above with no shining margin, the surface minutely rugulose, the base and sides with weak plicae, only visible under the microscope, posterior truncation dull and black; mesopleura and sides of metathorax faintly bluish green; tegulae very dark brown, with scattered indistinct punctures; mesothorax under microscope showing a finely lineolate surface, with sparse punctures; wings dusky, stigma and nervures brown; second cubital cell narrowed above, its lower and outer sides about equal; legs very dark brown, with dull whitish hair; hind spur with a very thick base, and three long oblique spines, the first two very long, and a rudimentary fourth spine, hardly visible and not always present, tip of spur curved; abdomen shining, without bands or spots of hair, but the apex with thin pale hair. Two specimens, with more projecting clypeus, the head thus appearing more elongated, were at first set aside as distinct, but I cannot satisfactorily separate them.

Male.—Clypeus with no light mark; antennae long, black; mesothorax and scutellum shining, brassy-green; legs without light markings; abdomen distinctly greenish.

Belgian Congo: Tshibinda, August 21–27, 14 females, 10 males (J. Ogilvie, L. Ogilvie, A. Mackie, Cockerell). The following table separates the male from some similar ones, which have been recorded from Africa:

1.—Clypeus with a light mark; flagellum yellowish red beneath...*morio* Fabricius.
Clypeus with no light mark.....2.
2.—Larger; flagellum mainly red beneath; abdomen strongly metallic.
smeathmanellus Kirby.
Smaller; flagellum black.....3.
3.—Wings clear; sternites with brown margins (Abyssinia).....*meneliki* Friese.
Wings dusky; sternites without brown margins.....*chloronotus*, new species.

I have examined *H. meneliki*, a specimen being in The American Museum. Only the male is known. The female *H. chloronotus* resembles *H. morio*, but the area of metathorax is much larger and quite different, the stigma quite differently colored, etc.

H. centrosus Vachal, female, is larger (6.5 mm.), with head, thorax and first tergite green, the rest of the abdomen black or dark brown. The wings are yellowish, with reddish nervures. The locality (Kalumba) is, I believe, in N. Rhodesia.

Halictus (Chloralictus) zimbabwicus, new species

FEMALE (type).—Length about 5 mm., anterior wing 4 mm.; head, thorax and the broad abdomen green; antennae black, the flagellum faintly brown beneath at end; legs black; tegulae black or nearly so; wings rather dusky hyaline; stigma large, rather light reddish brown, nervures pale. Head approximately round seen from in front, the clypeus moderately projecting; mandibles black; clypeus with the apical half black; face on each side of antennae blue-green, rather shining; front dull; mesothorax and scutellum dark bluish green, dullish, the mesothorax microscopically tessellate and lineolate, with very sparse weak punctures; area of metathorax large, semicircular, dull, with a shining edge, the surface densely microscopically pitted, with weak radiating plicae, at middle as well as sides, not reaching margin, and only seen under microscope; posterior truncation green, moderately shining; second cubital cell narrowed above, the lower side not as long as the outer; legs with pale hair; hind spur with two long oblique spines, and a minute serrulation on apical part, the apex of spur not hooked; abdomen blue-green, polished and shining, the margin of the second tergite brown, of the third and fourth pallid; apex with white hair.

MALE.—Length about 5 mm., anterior wing 3.5 mm.; slender, with narrow abdomen and very long antennae; dark bluish green, the mesothorax, scutellum and supraclypeal region more yellowish green, the shining, almost brassy scutellum contrasting with the dark blue metathorax; pubescence very scanty, abdomen without hair-bands; head broad, clypeus moderately produced, green, distinctly punctured; no light mark on clypeus, and mandibles entirely dark; supraclypeal area shining, but front dull, except a small brilliantly shining spot just in front of middle ocellus; flagellum very obscurely brownish beneath; metathorax and sides of thorax dark blue-green, the area of metathorax semicircular, dull, densely pitted, with no shining margin, but with irregular long plicae from the base; mesothorax shining, the median groove indistinct or incomplete; tegulae very dark brown, punctured; wings rather dusky hyaline, darker apically; stigma rather light brown, with a darker margin;

nervures pale brown, outer ones distinct; legs black, the tarsi a little reddish; abdomen slender, shining dark green.

Southern Rhodesia: Zimbabwe, Sept. 30, 1931 (Alice Mackie). By the metathoracic area this is related to *H. chloronotus* Ckll., but the hind spur and abdomen are quite different. There are more kinds of small green *Halictus* in South Africa than the books describe. *H. atroviridis* Cameron (type examined in British Museum, in very bad state) has the mandibles red, black apically, mesothorax finely and closely but distinctly punctured, hind margins of tergites rufous. Three other species in the British Museum bear manuscript names by Cameron, but they are all quite different from *H. zimbabwicus.*

Other specimens come from Vumba (or Vumbu), Umtali, May 23–26, 1932, 1 female, 3 males (J. Ogilvie, L. Ogilvie).

The male much resembles *H. angustulus* from Biano, but is more robust, more brassy-green, with green clypeus. Compared with *H. chloronotus* it is conspicuously smaller, with much smaller head. The male *H. chloronotus* has tufts of hair at sides of fifth sternite, lacking in *H. zimbabwicus.* These little bees seem to form a group in the African fauna, analogous to that of *H. tegularis* Robertson in the fauna of America.

The following key will be found useful:

1.—Males.....2.
Females.....3.
2.—Mesothorax brassy-green, abdomen not bluish.....*chloronotus.*
Mesothorax bluish-green, abdomen bluish.....*zimbabwicus.*
3.—Abdomen strongly green.....*zimbabwicus.*
Abdomen not or hardly metallic.....*chloronotus* and *angustulus.*

HALICTUS SUBGENUS HOMALICTUS COCKERELL

Halictus (Homalictus) radiatulus, new species

MALE.—Length about 5.7 mm., anterior wing 4.7 mm.; robust, green, with short antennae like those of a female (compare *H. pinnatus* Vachal, which is, however, a black species), and thin white pubescence, forming dense bands at bases of fourth and fifth tergites; head broad, the orbits converging below; mandibles pale yellow, subapically red, and black at tip; labrum yellow; clypeus with a broad apical pale yellow band, having an angular extension above in middle line; green portion of clypeus, and middle of front above antennae, shining; a polished spot laterad of each lateral ocellus; antennae black, the flagellum obscurely reddish beneath; third antennal joint red beneath, contrasting with the black second; thorax above conspicuously pilose, the hair in region of scutellum long; thorax golden green, the mesothorax dull and dark, with a very densely punctured surface; scutellum shining, obtusely bigibbous; area of metathorax large, glistening, with very strong radiating plicae, and in apical middle with a confused sculpture of partly transverse plicae;

tubercles with a small yellow spot; tegulae pale testaceous; wings very clear hyaline, stigma and nervures pale yellowish, outer recurrent and intercubitus invisible under a lens; legs green at base, but knees broadly, tibiae and tarsi, pale yellow, the tibiae stained with pale red; abdomen broad, shining, margins of tergites slightly brownish, not pallid, apical plate broad and dark; sternites with conspicuous hair-bands; the green of the abdomen is similar to that of the thorax.

Belgian Congo: Tshibinda, Aug. 21–27, 1931 (L. Ogilvie); also one from south of Bukavu, Aug. 28 (Alice Mackie). Among the African species nearest to *H. duponti* Vachal, which has a similarly sculptured metathorax, but has a red scape and entirely red legs. The marginal nervure is conspicuously darker than in *H. duponti*. According to definition, this falls in the subgenus *Homalictus* Cockerell (Philippine Jour. Sci., XV, July, 1919, p. 13), but whether it really belongs to this Oriental group, or to an independently-evolved African one simulating it, must remain somewhat uncertain.

HALICTUS SUBGENUS SELADONIA ROBERTSON

Halictus (Seladonia) atroviridis Cameron

I examined the type (in very bad state) in the British Museum, and noted: head relatively (as compared with *H. jucundus*) rather narrow, the orbits converging below; mandibles red, black apically; mesothorax finely and closely but distinctly punctured; hind margins of tergites rufous. One of Cameron's specimens is *H. jucundus* Smith.

Meade-Waldo considered *H. aethiopicus* Cameron to be the same, but this is not the case. I examined the type, and noted the black mesothorax; legs bright clear red except at base; hind margins of tergites broadly pale yellowish, broadest in middle; wings very clear, stigma and nervures very pale. Size of ordinary *Evylaeus*.

Halictus (Seladonia) austrovagans Cockerell

Cape Province: Ceres, Feb. 12–18 (A. Mackie, J. Ogilvie); Graaff-Reinet, Oct. 21–27 (J. Ogilvie, A. Mackie); Huguenot, Feb. (J. Ogilvie).

Halictus (Seladonia) banalianus Strand

Belgian Congo: Uvira, Aug. 28–29 (J. Ogilvie). This species is more robust than *H. hotoni* Vachal, with the dorsal hair of head and thorax pale ferruginous. Yet on examining a long series from localities in Katanga there is apparent a good deal of variation, and the insect seems to grade into *H. hotoni*. The original *H. hotoni* came from Delagoa Bay, and I have seen the type, but it is not known whether it varies toward *H. banalianus* in that locality. From Victoria Falls I have both

H. banalianus and *H. hotoni*, as I have determined them. A specimen from the Matopo Hills, S. Rhodesia (J. Ogilvie), is *H. hotoni*. I have females of *H. hotoni* from Greytown, Natal (A. Mackie), and Graaff-Reinet, C. P. (J. Ogilvie).

Halictus (Seladonia) capensis Friese

From Blaukrans, near Calvinia, C. P. (Cockerell) and Calvinia (J. Ogilvie) come males which are readily separated from *H. austrovagans*, common in the same region, by the larger size and blue-green color. Hair of head and thorax abundant and pure white; labrum, greater part of mandibles and narrow margin of clypeus light yellow; flagellum long, clear yellow or orange beneath; wings very clear, milky, stigma very pale orange-tinted; knees, tibiae and tarsi light yellow, except that the middle and hind tibiae are mainly dark in middle; abdomen shining. This insect is evidently the male of *H. capensis;* I have a female of that species from Calvinia (J. Ogilvie).

There is also a male *H. capensis* from Windhoek, S.W. Africa, Dec. 12, 1933 (L. Ogilvie).

Halictus (Seladonia) jucundus Smith

The typical *H. jucundus*, with fulvous hair on thorax above, and fulvescent abdominal bands, was collected in great numbers by Mr. and Mrs. Ogilvie at Bot River, Cape Province, Nov. 10, 1933. They also got three at Cape Town, on Lion's Head, Oct. 29, and three at Kirstenbosch, Nov. 10 and 18. A female from North Bank Halt, Norvals Pont, Orange Free State (L. Ogilvie), is typical as to color of hair, but the area of metathorax is rather more distinctly sculptured, and more pointed. One from the Matopo Hills, S. Rhodesia (A. Mackie), is rather small, with strongly fulvescent hair. Smith gives the type localities as "Cape; Sierra Leone." The Cape is now designated as the type locality; presumably the vicinity of Cape Town.

Females from Doorn River Falls, near Nieuwoudtville (J. Ogilvie, A. Mackie, J. Jooste) are rather small, with the hair of thorax above and abdominal bands grayish white, and the area of metathorax more pointed behind. They represent a weak local race, but I hesitate to offer a name for it, as it is not sharply defined and one specimen from the same locality has the pubescence distinctly fulvescent. Females approaching or belonging to this race are from Bosrand, Afdeling Farm, Orange Free State (J. Ogilvie); Upington, C. P. (J. Ogilvie, L. Ogilvie); Nelspoort, C. P. (J. Ogilvie); Windhoek, S.W. Africa (J. Ogilvie).

Halictus (Seladonia) pruinescens, new species

FEMALE.—Length about 6.5 mm., anterior wing 4.5 mm. Head and thorax bluish green, abdomen black with a faint green tinge, the first tergite green; hair of head and thorax dull white, rather abundant; head broad, face very broad, cheeks rounded, ordinary; mandibles with a conspicuous red subapical mark; clypeus shining, sparsely but strongly punctured, the lower half black; front and vertex dull, no shining spot laterad of ocelli, but a shining line along orbits at upper end; flagellum red beneath except at base; mesothorax dull, closely but distinctly punctured scutellum more shining, distinctly bigibbous; area of metathorax crescentic, with a finely wrinkled surface; sides of thorax hairy, the green color obscure; posterior truncation of mesothorax brilliantly shining; tegulae dark brown, with a pale spot in middle; wings dusky hyaline, stigma very pale, nervures pale; legs black, the middle knees with a red spot, and the tarsi reddish; tergites with pallid margins, on which are whitish hair-bands, not always very distinct, there are also the usual bands at extreme bases of tergites; surface of third and following tergites with thin whitish hair; apex with white hair. The hind spur has four strong oblique spines.

Cape Province: Ceres, Feb. 12–18, 1932 (J. Ogilvie, L. Ogilvie, A. Mackie). Eight females. *H. vansoni* Cockerell differs by the longer head with narrower face, and clear testaceous tegulae; *H. diductus* Cockerell by the much larger area of metathorax, appearing granular all over, and the yellowish hair of scutellum; *H. capensis* Friese by the shining mesothorax and blue-green abdomen. *H. banalianus* Strand, a robust green species with reddish hair on head and thorax above, hardly needs to be compared. It is a common species of the eastern part of the Belgian Congo, but to my surprise I find a female *H. banalianus* from as far south as Ficksburg, Orange Free State (J. Ogilvie).

Halictus (Seladonia) seminiger, new species

FEMALE.—Length about 6.5 mm., anterior wing 5 mm.; head and thorax dark green, abdomen black, including first tergite; hair of face, cheeks and sides of thorax white, of thorax above slightly brownish; head broader than thorax, face very broad, cheeks rounded, hairy; mandibles red subapically; clypeus black, with the upper end green; supraclypeal area green, shining; front and sides of face dull, a small shining spot at each side of the ocelli; antennae black, with the flagellum obscurely brownish beneath; mesothorax and scutellum olive-green, shining; area of metathorax very large, without a shining rim, appearing dull and granular under a lens; tegulae ferruginous, dark in front; wings hyaline, somewhat yellowish, stigma and nervures pale amber; second cubital cell receiving first recurrent nervure very near end; femora and base of legs black, but knees, anterior tibiae, middle and hind tibiae except a large black mark, and all the tarsi except a dusky stain on hind basitarsi, bright ferruginous; abdomen broad, moderately shining, the tergites with grayish apical bands, and more or less evident basal bands on second to fourth; caudal fimbria yellowish. Microscopic characters: mesothorax and scutellum strongly punctured; area of metathorax densely covered with fine wrinkled rugae; hind spur with

four long oblique spines. The pollen grains collected are spherical and pale yellow, apparently of some species of Compositae.

Belgian Congo (Katanga): Dilolo (type locality), July 24–27, 1931 (J. Ogilvie); Tenke, July 30–Aug. 9 (Cockerell); Elisabethville, Sept. 11–17 (J. Ogilvie). Near Kasai River, Angola, July 25 (J. Ogilvie). Related to *H. hotoni* Vachal, but easily separated by the black abdomen. *H. valligenis* Cockerell has a black abdomen, but is much larger, with a quite different head.

Nomioides maculiventris Cameron, variety **cyaneonotus,** new variety

There is a variety of the male of *N. maculiventris* which runs in Blüthgen's table (Stett. Ent. Zeit., 1925, LXXXVI, p. 95) straight to *N. halictoides* Blüthgen. But it is easily known from Blüthgen's species by the less hairy face, the scape yellow in front, the longer and more slender antennae, and the largely black hind tibiae. In *N. halictoides* the scape is all black, and the hind tibiae are entirely pale yellow. In a later paper (Stett. Ent. Zeit., 1934, XCV, p. 251) Blüthgen has given the contrasting characters of the males of the two species, but the variety now described has the clypeal yellow reduced as in *N. halictoides*, and the abdomen without light markings. *N. halictoides vernayi* Cockerell and Ireland has a yellow stripe on the scape in front, but goes with *N. halictoides*, certainly not with *N. maculiventris*. I give the variety of *N. maculiventris* a name, as it appears very distinct from the typical form, but I do not think it is a subspecies. I find I had mistakenly referred a specimen from Blaukrans to *N. halictoides*.

MALE.—Length about 4 mm., anterior wing 2.7 mm.; head and thorax rich purple-blue, abdomen black, legs with basal parts including femora black, and a large black saddle on hind tibiae, sometimes including the whole tibia except ends, but the knees, tibiae (except as stated) and tarsi light yellow; the scanty pubescence white. Head broad, approximately circular seen from in front; face and lower part of front hoary with white hair; supraclypeal area convex, shining black, contrasting with the blue sides of face; upper part of clypeus black; labrum, mandibles and lower margin of clypeus light yellow; antennae long; scape yellow in front, flagellum dark brown above, pale reddish or clay color below; mesothorax finely punctured, moderately shining, but not polished; scutellum with a conspicuously shining median line; area of metathorax large, dull, with the apex shining; tegulae with a large pale spot; wings perfectly hyaline, iridescent, with pink and green tints, stigma slightly yellowish, with a darker margin, nervures colorless; abdomen rather broad, black, the margins of the tergites somewhat pallid; no hair-bands or spots. Under the microscope the area of metathorax is seen to be finely pitted or punctured all over, on the apical part the punctures running in transverse lines; at the base of the area are some short irregular plicae. The second cubital cell is much narrowed above, and the first recurrent nervure meets the second intercubitus.

Cape Province: Graaff-Reinet (type locality), Oct., 1931, 2 males (Alice Mackie, J. Ogilvie); Calvinia, Nov. 1931, 3 males (J. Ogilvie); Blaukrans, near Calvinia, 1 male (Cockerell).

Nothylaeus binotatus (Alfken)

Belgian Congo: Elisabethville (J. and M. Bequaert). Three females, varying in the amount of red, and the size of the light spots on scutellum, these being in one specimen reduced to minute dots.

Ceratina ericia bukavana (Cockerell)

Belgian Congo: Kabinda, 3♂, 4♀ (J. Bequaert). All the females at flowers of *Vernonia* No. 50. They have the light bar on clypeus unusually small. Females of *C. geigeriae* Cockerell were also taken at Kabinda, but not on the *Vernonia*.

Ceratina nitidella, new species

MALE (type).—Length 4 mm. or slightly over; shining black, the head and mesothorax highly polished; the clypeus with a reversed T in white, the stem very thick, the upper end truncate, the lateral extensions cuneiform; labrum with a round white spot, narrowly separated from clypeus; mandibles and antennae black; scutellum dullish, only a little shining; base of metathorax dull; tubercles with a white spot; tegulae brown; wings dusky hyaline, with brilliant rosy and green iridescence; nervures dark; second cubital cell large, triangular; stigma large, very dark brown; tarsi and anterior tibiae rufous; abdomen moderately shining, the tergites not fimbriate.

FEMALE.—Similar to the male, but clypeus with a broad white bar, obtusely rounded above, with a little extension on each side below; labrum all black, with a small shining pit; tubercles white-spotted as in female; legs darker.

Liberia: Du River, Camp No. 3 (J. Bequaert). There are two small species, described by Strand, from the Cameroons. *C. ludwigsi* Strand, female, is easily separated by the light brownish-yellow labrum, and the mandibles light brownish yellow with black end. *C. foveifera* Strand is known by the clear reddish clypeus and red-brown mandibles. A nearer relative appears to be the S. African *C. liliputana* Brauns, which is distinctly smaller, with a much smaller, pale, stigma, pale nervures, more slender marginal cell, first recurrent nervure joining cubital cell much nearer end.

Thrinchostoma malelanum, new species

FEMALE.—Nearly agrees with the description of *T. wellmani* Cockerell, but compared with the type of that species evidently distinct by the following characters:

Third and fourth tergites with silvery-white hair on disk, and some black hair at base; first recurrent nervure reaching base of third cubital cell; abdomen broader..... *wellmani* Cockerell.

Third and fourth tergites with abundant black hair on disk, and silvery only on apical depression; first recurrent nervure meeting second intercubitus; abdomen narrower.....*malelanum*, new species.

Length about 13 mm., anterior wing 9.2 mm., length of head about 3.5 mm.; black, including antennae (flagellum faintly reddish beneath) and legs (tarsi obscurely reddish apically); hair of head and thorax white, black hair on scutellum; clypeus convex, polished, with an apical triangular region which is very coarsely punctured; malar space a little longer than broad; flagellum with modified areas on the last four joints; prothorax with grayish-white hair, the fringe of tubercles dense, and a similar dense band just behind tubercles; mesothorax dull, finely punctured, without conspicuous hair, except a band of light hair along hind margin; scutellum dull, with a shining area in middle; area of metathorax rugose, the microscope shows vermiform rugae; tegulae dark brown, pallid anteriorly; wings ample, hyaline, slightly grayish (not reddish), the outer margins dusky; stigma dusky red, nervures brown; basal nervure falling considerably short of nervulus; second cubital cell nearly square, but broader than high, its pubescence not differing from that of other cells; first recurrent nervure meeting second intercubitus; third cubital cell considerably longer than in Blüthgen's figure of *T. torridum* Smith; legs with pale hair, dark, somewhat reddish, on inner side of hind tarsi; abdomen rather narrow, apical margins of first four tergites depressed, pallid, with silvery hair; base of first tergite with long white hair, disks of third and fourth with long black hair; apex with black hair.

Belgian Congo: Pangula, near Malela, "Vill. Malela, (Chief Kasende), 5° 40′ S., 23° 45′ E." (J. Bequaert). It is also related to *T. patricium* (Strand), which is smaller (11 mm.), with brownish abdomen, and the hair on inner side of hind tarsi clear yellow.

Thrinchostoma torridum (Smith)

Tanganyika Territory: Kilossa (or Kilosa), alt. 1950 ft., male, March 20, 1922 (Loveridge).

Morgania nigripes (Friese)

Specimens from Mlanje, Nyasaland (Neave) and Blantyre (J. B. Davey), recorded as *M. fortis* Cockerell, really belong to *M. nigripes*. Bischoff's statement, "flügel klar," is misleading; the wings are dilute fuliginous.

Crocisaspidia nigripes (Friese)

Belgian Congo: Luputa, Dist. Lomami (J. Bequaert).

Eucara laticeps (Friese)

Belgian Congo (Katanga): Elisabethville (J. Bequaert).

Gronoceras bombiformis (Gerstaecker)

Belgian Congo: Kabinda (J. Bequaert).

Gronoceras cerberus (Friese)

S.W. Africa: Windhoek, Dec. 14 (J. Ogilvie).

Gronoceras felina (Gerstaecker)

Bechuanaland: Palapye Road, March 4 and 5 (L. Ogilvie, J. Ogilvie).

Gronoceras holorhodura Cockerell

Belgian Congo: Kabinda, 6° 8′ S., 24° 21′ E. (J. Bequaert).

Megachile pennata Smith

Cape Province: Upington, Dec. 7 (J. Ogilvie); Mafeking, Feb. (L. Ogilvie, J. Ogilvie).

S.W. Africa: Okahandja, Jan. 23 (J. Ogilvie).

Megachile rufipes (Fabricius)

Belgian Congo: Kabinda, nest in beam of house (J. Bequaert). Variety *xanthoptera* (Schletterer), Luputa (J. Bequaert).

Trigona bocandei Spinola

Belgian Congo: Luputa (J. Bequaert).

Trigona cameroonensis Friese

Belgian Congo: Kabinda (J. Bequaert); Vill. Malela (Chief Kasende) (J. Bequaert).

Trigona staudingeri Gribodo

Belgian Congo: Kabinda (J. Bequaert).

Trigona togoensis Stadelmann

Belgian Congo: Kabinda, at flowers of cultivated coffee (J. Bequaert).